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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,501	03/01/2002	Frank Johannes Alfred Dirk Bakkeren	ACO 2701 PIUS	7915

7590 09/26/2003

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EXAMINER

BERMAN, SUSAN W

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 09/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p align="center">10/018,501</p>	<p>Applicant(s)</p> <p align="center">BAKKEREN ET AL.</p>	
	<p>Examiner</p> <p align="center">Susan W Berman</p>	<p>Art Unit</p> <p align="center">1711</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5 and 7-14 is/are rejected.
- 7) ☒ Claim(s) 4 and 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____ |

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Specification

The abstract of the disclosure is objected to because the Abstract is not printed on a separate page. The PCT cover sheet contains extraneous text that is not part of the Abstract. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 10 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 provides for the use of a coating composition, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

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Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 7 and 9-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Moyer et al (4,078,118). Moyer et al disclose pentaerythritol esters of mercapto acids plus long chain fatty acids. A small group of operable saturated and unsaturated fatty acids, including oleic and linoleic acids, are taught in column 2, lines 3-6. The disclosed esters containing thiol groups meet the requirement for both a thiol compound (a) and a polyunsaturated condensation product (b), as set forth in claim 1. Compositions comprising the pentaerythritol esters of mercapto acids plus long chain fatty acid compound, a photoinitiator and a polyene are taught.

Compounds obtained from unsaturated fatty acids, such as oleic or linoleic acids, and compositions comprising said compounds and a photoinitiator are considered to anticipate the instantly claimed compositions. With respect to claims 2 and 11, Moyer et al disclose compositions wherein the ratio of unsaturated groups to –SH functional groups is as claimed. It is noted that the claims do not specify whether or not the unsaturated groups are those in the condensation products. Therefore, the claims are interpreted to include all components in the composition comprising unsaturated groups. Moyer et al teach polyenes having unsaturated groups, as well as the disclosed esters when obtained from

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unsaturated fatty acids. With respect to claims 3 and 12, Moyer et al teach 2 to 98 percent by weight of the ester compound. With respect to claims 5 and 13, the disclosed compositions do not contain solvents. With respect to claim 7, several of the disclosed photoinitiators are activatable by visible light. Alternatively, It would have been obvious to one skilled in the art at the time of the invention to select one or more unsaturated fatty acids from the fatty acids disclosed for preparation of the pentaerythritol esters of mercapto acids plus long chain fatty acid compound, as taught by Moyer et al, in the absence of a showing of unexpected results obtained by such a selection.

Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as obvious over Moyer et al (4,078,118), as applied to claims 1-3, 5, 7 and 9-13 above, further in view of Ostlie (5,876,805). See the discussion of the disclosure of Moyer et al above. Ostlie discloses visible light polymerizable thiol-ene compositions comprising at least one acyl phosphine oxide photoinitiator. See column 3, line 66, to column 4, line 67, and column 6, lines 13-38. It would have been obvious to one skilled in the art at the time of the invention to employ an acyl phosphine oxide as the photoinitiator in the thiol-ene compositions disclosed by Moyer et al, as taught by Ostlie in analogous compositions. Moyer et al provide motivation by teaching the use of sunlight for initiation. Ostlie provides motivation by teaching fast cure times and addition of extender pigments and their advantages. Further motivation is provided because Moyer et al teach pentaerythritol esters of mercapto acids plus long chain fatty acid compound Ostlie teaches that mercatopropionate tetraesters of pentaerythritol are preferred polythiols.

Allowable Subject Matter

Claims 4 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The cited prior art does not suggest isocyanates for preparation of the disclosed esters or aqueous coating compositions.

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Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Van Den Berg et al (6,548,565), Vrancken et al (3,952,032), Meixner et al (5,744,248) and Shahidi et al (4,035,321). McDowell (4,169,167) discloses compositions comprising chain extenders, such as thiol compounds, and reactive oligomers that can be obtained from active hydrogen containing precursors such as esters of hydroxy fatty acids or alkyd resins containing hydroxyl groups. However, there is no motivation to select polyunsaturated active hydrogen containing precursors obtained from fatty acids from the numerous alternatives taught by McDowell et al. Doomen et al (5,859,135) disclose aqueous coating compositions comprising lipophilic autoxidizable polymers such as drying oil-modified polyesters (column 6, line 63, to column 7, line 46). The crosslinking agents disclosed are amines, acetoacetates, malonate-containing compounds or allyloxy containing compounds.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W Berman whose telephone number is 703 308 0040. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703 308 2462. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0661.



Susan W Berman
Primary Examiner
Art Unit 1711

SB
September 16, 2003